# APPARATUS, METHODS AND PROCESSES FOR SORTING PARTICLES AND FOR PROVIDING SEX-SORTED ANIMAL SPERM

<u>Abstract of the Disclosure</u>

A multi-channel apparatus for classifying particles according to one or more particle characteristics. The apparatus comprises a plurality of flow cytometry units, each of which is operable to classify particles in a mixture of particles by interrogating a stream of fluid containing the particles with a beam of electromagnetic radiation. The flow cytometry units share an integrated platform comprising at least one of the following: (1) a common supply of particles; (2) a common housing; (3) a common processor for controlling operation of the units; (4) a common processor for receiving and processing information from the units; and (5) a common fluid delivery system. The integrated platform can include a common source of electromagnetic radiation. A method of the invention comprises using a plurality of flow cytometry units sharing the integrated platform to perform a flow kilometric operation, such as analyzing or sorting particles.